

# Work Order ID 86462

\*86462\*

Page 1

June-29-12 1:27:16 PM

Item ID: D4541-2

Accept

\*N9000040100\*

Setup Start \*NS1\*

Revision ID:

Stop \*NS2\*

Item Name: Bracket

Start Date: 29/06/2012 Start Qty: 10.00

\*10\*

Cust Item ID:

Required Date: 13/07/2012 Req'd Qty: 10.00

\*10\*

Customer:

Reference:

Approvals: Process Plan: MLJ

Date: 12/06/29

Tooling:

Date:

Run Start \*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D4541	C								

100

0.00

\*100\*

Waterjet

FLOW CNC Waterjet

6061 .032

Memo

1- Cut as per dwg

Prog rev: C

Dwg rev: C

2- Deburr

110

QC2- Inspect parts off machine FAI/FAIB

0.00

\*110\*

QC

Quality Control

Memo

0.00

SCRAP

Scrap

not 11

No good

u

10 0 Jm 12-7-8

10 0 Jm 12-7-8

Ae

12.07.23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

# Work Order ID 86462

**\*86462\***

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June-29-12 1:27:16 PM

Item ID: D4541-2

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Bracket

Start Date: 29/06/2012 Start Qty: 10.00

**\*10\***

Cust Item ID:

Required Date: 13/07/2012 Req'd Qty: 10.00

**\*10\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 <b>*120*</b> QC Quality Control	QC8- Inspect parts - second check  Memo	0.00 0.00		8/26/12		(40)			
150 <b>*150*</b> Packaging Packaging	Identify as per dwg & Stock Location: <u>GA</u>  Memo	0.00 0.00				10			8/26/12
160 <b>*160*</b> QC Quality Control	QC21- Final Inspection - Work Order Release  Memo	0.00 0.00							

MF  
12-07-23

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries

# Picklist Print

June-29-12 1:27:20 PM

Page 1

Work Order ID: 86462

**\*86462\***

Parent Item: D4541-2

**\*D4541-2\***

Parent Item Name: Bracket

Start Date: 29/06/2012

Required Date: 13/07/2012

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP revA 12.01.12 New Issue EC verified by:DD IPP REV:B  
12.02.24 as per dwg revb DD verf:EC IPP REV:C 12.05.08 as  
per dwg revC DD verf:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

M6061T6S.032

Purchased

No

100

sf

247.7760

0.416

4.378947

**\*M6061T6S 032\***

**\*\***

**4.5 SF**

*Jm 1278*

6061-T6 Sheet 0.032"

Location

Loc Qty

Loc Code

MAT021

247.776

118106

46.136

120218

20.13

120285

42.24

121099

139.27

**122311**

**122311**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

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**NOTE:** Date & initial all entries



# Dart Aerospace Ltd

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

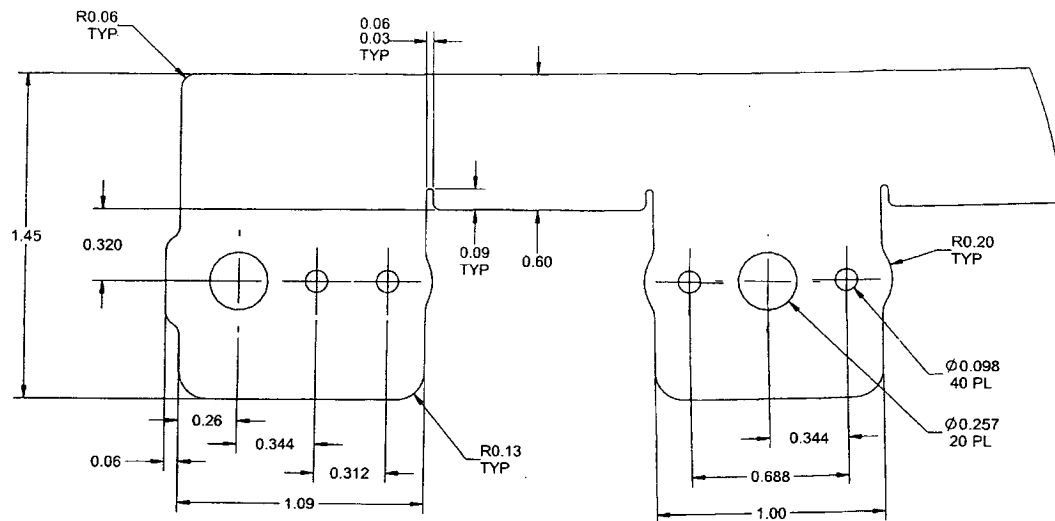
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**NOTE:** Date & initial all entries





**DETAIL A**  
TYP TAB DETAIL  
SCALE 8X

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER

NO. 86462 MLJ  
12/06/29



**D4541-1 BRACKET**

RELEASE  
2012-05-07

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.12 lbs
- 8) PROFILE PER DRAWING FILE "D4541-1-REVC.DXF"

C	D4541-SF WAS -S, ADD -S-6; RMV FINISH (-1/-2/-3/-5/-7); 0.70 WAS 0.00 (ZN D1-3)	CP	12.04.20
B	-S: 1.55 WAS 1.45 (ZN C4-4)	CP	12.02.01
A	NEW ISSUE	CP	12.01.09
REV.	DESCRIPTION	BY	DATE
DESIGN	<i>[Signature]</i>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA DRAWING NO. <b>D4541</b> REV. C SHEET 1 OF 7 TITLE <b>BRACKET</b> SCALE NTS COPYRIGHT © 2012 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD	
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MFG. APPR.	<i>[Signature]</i>		
APPROVED	<i>[Signature]</i>		
DE APPR.	<i>[Signature]</i>	DATE <b>12.04.20</b>	

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

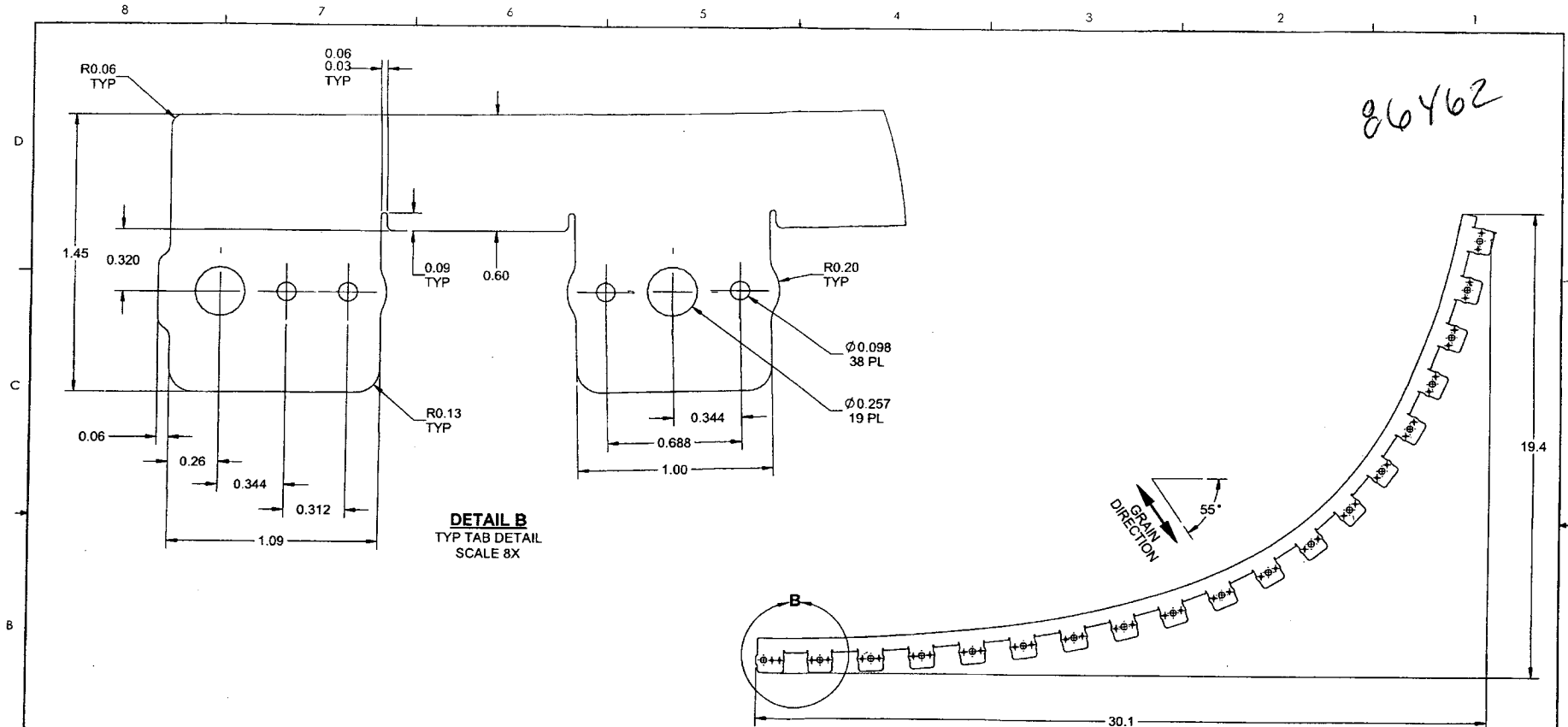
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries






86462



D4541-2 BRACKET

RELEASED  
2012-05-07

- NOTES:
- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
  - 2) FINISH: NONE
  - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
  - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
  - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
  - 6) IDENTIFICATION: NONE
  - 7) WEIGHT: 0.12 lbs
  - 8) PROFILE PER DRAWING FILE "D4541-2-REV.C.DXF"

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

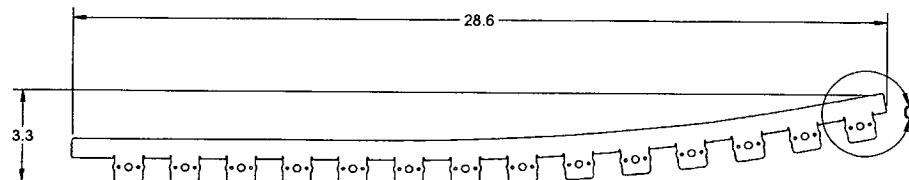
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Resolution: \_\_\_\_\_ Disposition: \_\_\_\_\_ QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

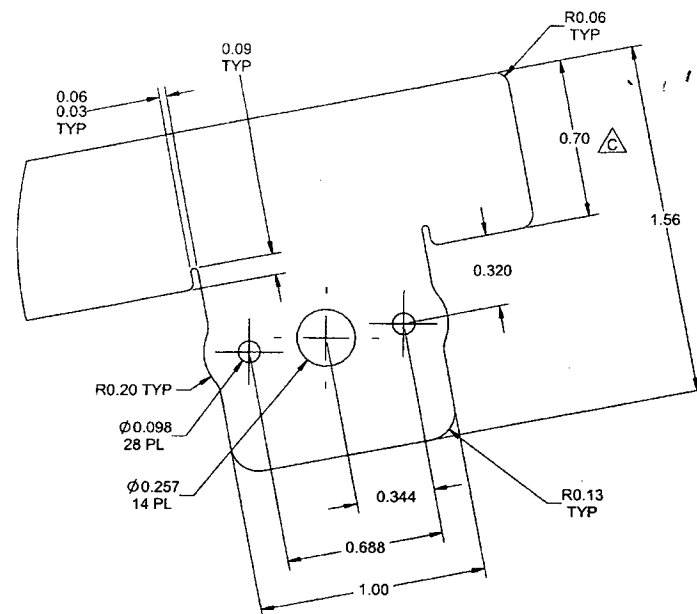
**NOTE:** Date & initial all entries

86462



**D4541-3 BRACKET**

GRAIN  
DIRECTION



**DETAIL C**  
TYP TAB DETAIL  
SCALE 4X

**RELEASED**  
2012-05-07

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.09 lbs
- 8) PROFILE PER DRAWING FILE "D4541-3-REV.C.DXF"

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MFG. APPR.				SHEET 3 OF 7
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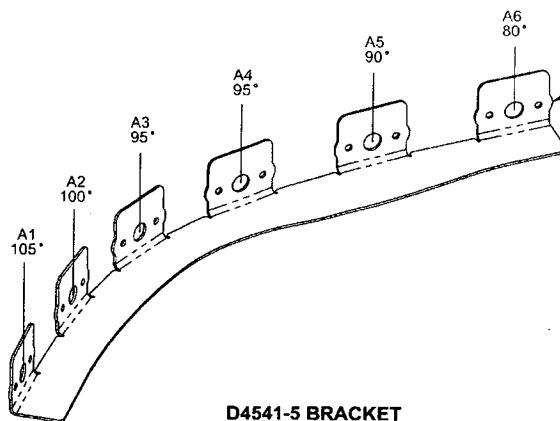
W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

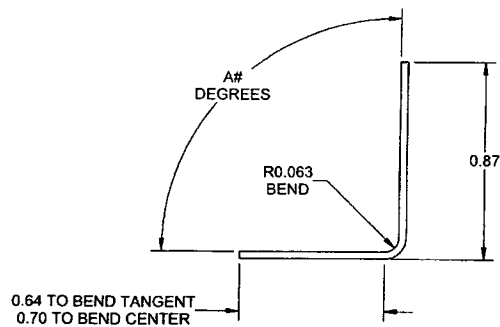
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NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries



**D4541-5 BRACKET**  
(MAKE FROM D4541-5F)



**DETAIL D**  
BEND DETAIL  
SCALE 2X

**NOTES:**

- 1) MATERIAL: MAKE FROM D4541-5F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: DART P/N & B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

DESIGN		<b>DART AEROSPACE LTD</b>	
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MFG. APPR.		D4541	SHEET 4 OF 7
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RELEASED  
2012-05-07  
JAN

26462

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

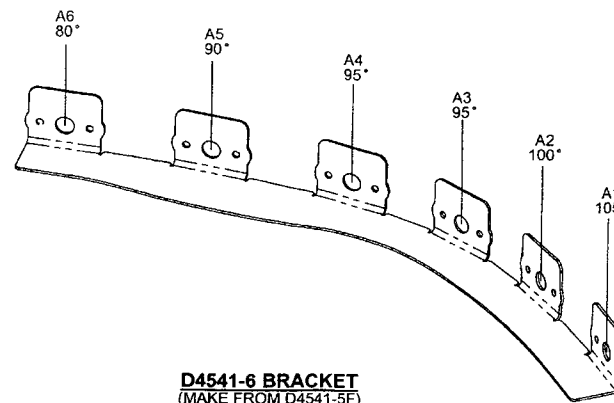
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

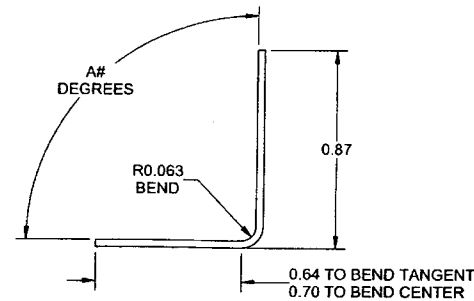
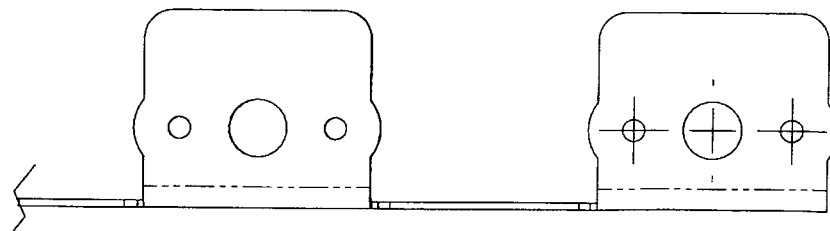
**NOTE:** Date & initial all entries



26462



**D4541-6 BRACKET**  
(MAKE FROM D4541-5F)



**DETAIL E**  
BEND DETAIL  
SCALE 2X

RELEASED  
2012-05-07

**NOTES:**

- 1) MATERIAL: MAKE FROM D4541-5F
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: DART P/N & B/N PER DART QSI 044 6.1
- 7) WEIGHT: 0.04 lbs

DESIGN		<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA		
DRAWN				
CHECKED	AS		DRAWING NO. <b>D4541</b>	REV. <b>C</b>
MFG. APPR.				SHEET 5 OF 7
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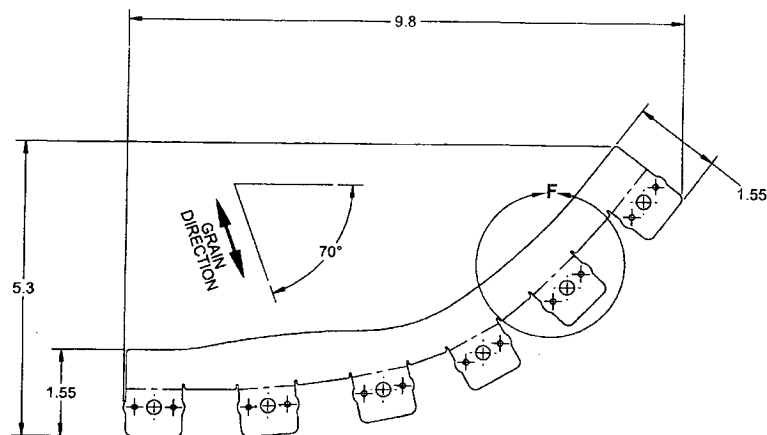
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Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

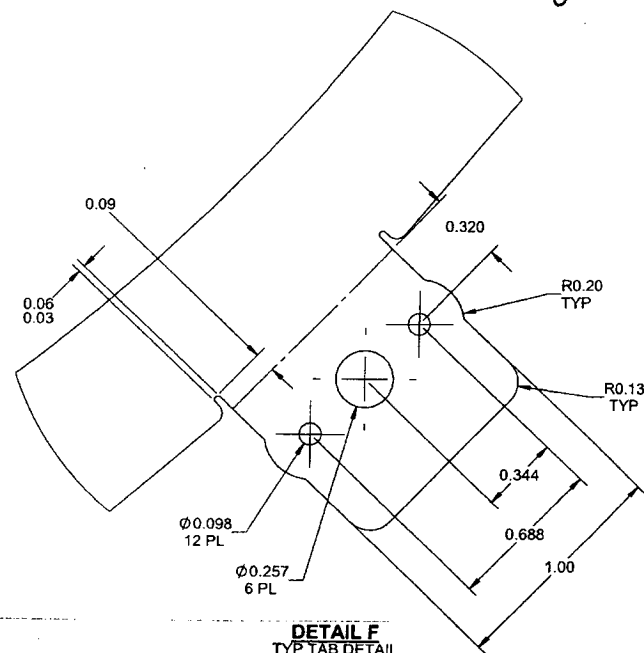
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**D4541-5F FLAT PATTERN**




86462

RELEASE  
2012-05-07

**NOTES:**

- 1) MATERIAL: 6061-T6 ALUMINUM SHEET, 0.032 THICK  
PER QQ-A-250/11 OR AMS 4025 OR ASTM B209  
REF DART SPEC. M6061T6S.032
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.015 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.04 lbs
- 8) PROFILE PER DRAWING FILE "D4541-5-REVC.DXF"

DESIGN		<b>DART AEROSPACE LTD</b>	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
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